a beam splitter ahead of said dark field stop for splitting a partial beam from the receiver beam path, said photo detector including a photo diode arranged in said partial beam, said photo diode being disposed approximately in the focal point of said optical receiver system; and

an electronic analyzing system for determining the macroscopic geometric parameters from the signal.

27. (Twice Amended) A laser scanner measuring system according to Claim 14, wherein said emitter unit and said receiver unit form a single combination unit and wherein a reference beam path is realised in the combination unit, in the outside space or by means of a light guide, which is superimposed by the beam path coming from the object to be measured in such a way that the resulting interference pattern which varies locally and in the course of time is detected by means of at least one detector element.

29. (Twice Amended) A laser scanner measuring system for measuring macroscopic parameters of an object, the macroscopic geometric parameters including at least one of contour, size and wall thickness of the object, the system comprising

an emitter unit having a laser, a beam deflector unit and an optical emitter system, which define a scanning beam path as well as a scanning plane;

a receiver unit including a photo detector disposed in the focal plane of an optical receiver system for a receiver beam path, the surface normal of said optical receiver system being parallel with the scanning beam path, and said photo detector being a photo diode array or a position-resolving photo diode, the receiving unit receiving the beam after scanning the object and

generating a signal; and

an electronic analyzing system for determining the macroscopic geometric parameters from the signal.

In the Drawings:

Submitted herewith is a Request for Drawing Change Approval.